



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,800	08/19/2003	Edward Krainer	0192-PA	5188
7590	11/14/2006		EXAMINER	
CROMPTON CORPORATION			SANDERS, KRIELLION ANTIONETTE	
Benson Road			ART UNIT	PAPER NUMBER
Middlebury, CT 06749			1714	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

S

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/643,800	KRAINER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kriellion A. Sanders	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 16 August 2006.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-6 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 and 8-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>8/06</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-6, 8-14 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant's claims as amended or newly presented do not provide a clear written description of the new limitation that if and when present, the weight ratio of the metal soap to the combined weights of the metal salt of the strong acid plus the alkylene glycol is no greater than about 3:1. This required ratio is not reasonably conveyed by the original disclosure.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### ***Claim Rejections - 35 USC § 103***

Art Unit: 1714

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 8-15 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Anderson, US Patent No. 5575951.

Anderson is relied upon for reasons of record. Anderson discloses a homogeneous, clear liquid stabilizer suitable for use in a vinyl chloride polymer comprising:

- ◆ a liquid mixture of a metal soap stabilizer, such as, a mixture of a mixed barium/zinc soap stabilizer and
- ◆ a solubilized metal perchlorate, for example, a barium perchlorate.

The "metal soap stabilizer" component comprises one or more metal salts of a carboxylic acid, particularly salts of saturated and unsaturated carboxylic acids having up to 22 carbon atoms.

The second major component of the invention is a solubilized metal perchlorate. The metal may be selected from metals from Group IA (e.g., sodium or potassium), Group IIA (e.g., barium or magnesium), Group IIIA (e.g., aluminum), Group IVA (e.g., tin or lead), or Group IIB (e.g., zinc or cadmium) of the Periodic Table of the Elements.

Solubilization of the perchlorate is preferably achieved by using a relatively high boiling polar oxygenated solvent. Representative examples of these solvents include tripropylene glycol, butylcarbitol, triethylene glycol, and butylene glycol.

Art Unit: 1714

Organophosphite esters may also be included in the composition. Representative esters of this class include triaryl phosphites such as triphenyl phosphite and tris (nonyl phenyl) phosphite; mixed alkyl aryl phosphites, such as diphenyl isodecyl phosphite, diphenyl isooctyl phosphite, phenyl di(isodecyl) phosphite, octylphenyl bis(iso-octyl) phosphite and trialkyl phosphites, such as tris(iso-octyl phosphite, tris(isodecyl) phosphite, tris(iso-tridecyl) phosphite and tris(dipropylene glycol) phosphite. A further option is that acid phosphites, such as diphenyl phosphite, di(nonyl phenyl) phosphite and di(isooctyl) phosphite can be included in the composition.

The compositions of the patented invention may also contain conventional antioxidants. Representative antioxidants of this class include di-styrenated nonyl phenol, 2,6-di-t-butyl phenol, 2,2'-methylene bis (4-methyl-6-t-butyl phenol), 2,2'-bis-(4-hydroxyphenol) propane, octadecyl-3-(3',5'-di-t-butyl-4-hydroxy phenol) propionate, pentaerythritol tetrakis [3-(3', 5'-di-t-butyl-4-hydroxy phenol) propionate].

Lubricants such as oleic acid, lauric acid, isostearic acid, mineral oil, glycerol monooleate, glycerol mono-ricinoleate and butyl stearate are also optional constituents of the patented formulation.

Applicant's invention as supported by the original disclosure is fully met by the reference. Applicant's claims as presently presented are obvious over the reference in that applicant has shown nothing of an unexpected nature by chiseling out a particular the weight ratio of the metal soap to the combined weights of the metal salt of the strong acid plus the alkylene glycol that is no greater than about 3:1. Applicant's data as presented in the

specification does not indicate anything of an unexpected nature at this ratio than for compositions wherein the metal soap is used at ratios that overlap with the ratios of Anderson.

Additionally, the metal soap of applicant's claims is an optional component to which patentability may not be totally attributed.

***Response to Arguments***

2. Applicant's arguments filed 8/16/06 have been fully considered but they are not persuasive.
3. Applicant argues that in the present invention as amended, if the optional metal soap is present, the weight ratio of the metal soap to the combined weights of the polyalkylene glycol and the metal salt of the strong acid is no greater than about 3. Applicant states that this ratio is supported by dividing the weight of the calcium stearate metal soap by the combined weights of the polyalkylene glycols and the sodium perchlorate in applicant's examples 1-5 and 7-10. This argument does not persuade of patentability because applicant has not shown that utilization of a smaller ratio of metal soap to the combination of polyalkylene glycol and metal salt of strong acid results in unexpected results over the prior art invention of Anderson et al. Applicant's examples in the specification are not limited to the presently claimed ratio, nor does applicant state in the specification that the compositions of the invention must be limited to the presently claimed weight ratios. In fact, applicant's specification indicates comparable results for compositions comprising the weight ratio of metal soap that is less than 3 or greater than 3. Therefor, nothing of an unexpected nature is seen by limiting the weight ratio of the metal soap to the combination of polyalkylene glycol and metal salt of strong acid to 3:1.

***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 8:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kriellion A. Sanders  
Primary Examiner  
Art Unit 1714

ks